It was mid-November, and Ray took another insufferably long train ride, this time to Sikeston, Missouri for six weeks of primary flight training. It was a small hiccup of a town in southeastern Missouri, just west of the Mississippi River. The Sikeston Memorial Municipal Airport, built in the 1930s, became known as Harvey Parks Airport from 1940 until 1944. Many wooden barracks were constructed to hold the Missouri Institute of Aeronautics and Parks Air College, established after General Hap Arnold asked flight training operations to triple their enrollments. Later, Parks became one of the first colleges for commercial aviation in the country. At the time Ray attended, it was under the control of the 309th Army Air Forces Training Command (AAFTC).

The flight school was located across from an open field where a large herd of bulls often grazed. After being essentially quarantined at the last base, Kelly Field, the young cadets’ hormones were raging so that when they came to town, any moderately good-looking female became a potential object of their affections. With a rascally smile, Ray remembered, “The local girls began to refer to us as the Sikeston Bulls. I can’t imagine why.”

The men were well on their way to becoming pilots, viewed as elite by most non-coms and enlisted men, and their barracks were more befitting to the officers they would become. The base had many amenities, including a country club where the cadets could unwind and invite dates for regular weekend dances. There were also opportunities to stay fit, and in the mornings, the men fell out for calisthenics. “I remember it had a fine handball court which I made very good use of,” Ray fondly recalled.

Soon after arrival, the men were ushered to the local PX. The late fall weather was very chilly, and the cadets, wearing just their service uniforms, jogged to the PX with their arms crossed and heads down, trying to stay warm. They lined up, and became very excited to find out they were going to receive their official USAAF sheepskin-lined leather flight suits, leather helmets, goggles and a parachute. For Ray, reality set in quickly. He wasted no time donning his flight jacket. The cadets walked into the PX shivering and miserable. They left, beaming with pride and a whole lot warmer. They really were about to learn to fly.

After a few days of indoctrination, which included a portrait session for the base magazine, josport, Ray and the other cadets were taken to the airstrip, which had a paved runway, concrete aprons and a sizeable hangar. It was a real airbase – not an ad-hoc grass strip like the one at the CTD in Ohio. Parked both inside and just in front of the hangar was the flight line, a row of USAAF single engine PT-19 training aircraft, built by the Fairchild Aircraft Company. Compared to the Piper J-3 Cub, it was a more advanced airplane. It had a cantilever low-wing configuration with fixed landing gear and tailwheel and a two-bladed propeller. It was designed for training with a tandem-seat, open cockpit arrangement. The simple, but rugged construction included a fabric-covered welded steel tube fuselage. The remainder of the aircraft – the center section, outer wing panels and tail assembly - was constructed using plywood. The use of an inline engine allowed for a narrow frontal area, which gave the pilot and student excellent visibility with a wide wheel base that allowed for stable ground handling. The engine was a 200 horsepower, six-cylinder inverted inline, air-cooled Ranger L-440-3, that gave the airplane just enough power and handling characteristics closely akin to combat aircraft of the day. The PT-19 also had a rudimentary two-way communication device called a josport. The josport enabled the student and instructor to communicate through a cone attached to a rubber tube, which also was attached to their flight helmets with a “Y” connector. Similar to a stethoscope. The Y connectors allowed for the addition of a voice piece, enabling two-way communication between instructor and student.

With their instructors, the men were given a tour of the aircraft, pointing out the salient components and familiarizing them with the cockpit, which had a full array of instrumentation that included airspeed and altitude indicators, an artificial horizon (also known as an attitude indicator), turn coordinator and vertical speed indicator. “I was assigned to a flying instructor. He was a fine, quiet, and elderly man. He may have been one of the flight school’s permanent instructors,” recalled Ray.

Before their first flights in the PT-19s, the men donned their flight suits. Parachutes then were brought into a briefing room, where instructors prepared them for their first “missions.” The instructors would take off, fly and land the planes, but the cadets were expected to listen and learn for at least three flights, or about ten hours, before they’d be allowed to take the stick and practice steering the planes through lazy eight maneuvers and stalls, which are well-known pilot killers. Without knowing the stall recovery technique, the aircraft would go into a spin and auger into the ground. They were also shown how to affix and communicate through the josport device during the flight.

After the briefing, the instructors led the cadets to the flight line in front of the hangar. Ray could feel the tingling in his gut as he climbed up on the wing of his designated plane, inserted himself into the forward seat and fastened his harness. His instructor climbed aboard, taking the rear seat while telling Ray to attach his end of the josport to his helmet so he could walk him through the engine startup procedure. He explained how to set the choke, prime the engine, and then allow a member of the ground crew to insert a hand crank into an opening on the left side of the engine cowling. The PT-19 had no electric starter. When he turned the crank, the propeller spun slowly. After a couple of revolutions, the engine sputtered to life. The pilot instructor reset the choke, pushed the throttle forward, and the engine revved to a smooth moan. He released the brake. causing the airplane to slowly roll forward, and explained his every move to Ray through the josport. They taxied into position at the end of the runway, using differential braking to turn the plane. The instructor pushed the throttle to full open, and they lunged forward. Ray could feel a surge of adrenaline as the G-forces pushed him back against his seat. After a few seconds, the tail wheel lifted off the ground, bringing the plane to a level position as they gathered speed. Ray could feel the wheels leave the runway as they started to gain altitude. The air was chilly, but it was a bright sunny day. Just a few scattered, fluffy altocumulus clouds dotted the sky. In his sheepskin-lined flight suit, he felt plenty warm, but the open cockpit buffeted the men a bit as they made a sweeping turn to the right and made a low pass over the airfield. To Ray, the men and planes on the ground looked like toys. They reminded him of the balsa wood models he used to build as a boy.

After gaining altitude, the instructor told him to observe as he brought the aircraft to a stall. He pulled back the stick, causing the plane to lose speed. It started to fall backward, then slipped to the right. The instructor kept the rudder straight, pushed the stick forward allowing it to nose downward into a dive, gathering enough speed to create lift. He then leveled off and climbed back to altitude. He described every step in detail to Ray.

After the required ten hours of instruction, on their fourth flight, the flight instructor told Ray to take the controls and practice some controlled stalls, reassuring him that he would take control if they got into trouble. It was the pivotal moment Ray dreamed of. For the very first time, Ray took control of a powerful aircraft. He placed his feet on the rudders and grabbed hold of the stick.

On the console was an instrument that looked essentially like a ball sealed inside a curved glass tube. Known as an inclinometer, it was also called simply the “ball in the tube.” The ball gives an indication of whether the aircraft is slipping, skidding or in balanced flight. An airplane has three axes: pitch, roll and yaw. Pitch means that the nose is pointing up or down, roll occurs whenthe aircraft banks left or right and yaw indicates the sideways, or “skidding,” motion. When the aircraft turns, the pilot must keep the ball centered inside the glass tube. He does this by coordinating the rudder, which controls the yaw with the stick that controls the pitch and roll. If the ball moves too far in either direction, he’ll experience heavy lateral forces that put undue stress on the airframe.

With little effort, Ray banked a slow turn to the left, straightened out the aircraft, then banked a slow turn to the right, all the while keeping an eye on the inclinometer. He repeated the process, carving a lazy eight pattern. The instructor told him to keep it up, making certain Ray developed a feel for the controls. After two or three lazy eights, his instructor told him through the josport to climb to 5,000 feet and attempt a stall recovery. Ray pulled back on the stick and pushed the throttle forward to maintain a constant speed during the climb. Starting to get nervous as they approached the 5,000-foot mark, Ray did as he was instructed. He kept the nose up then pulled back the throttle. Gravity took over and the airplane slowed to a stall. At the apex the plane nosed over and started to fall back to earth. Ray felt weightless. He kept the stick straight, opened the throttle and pointed the nose down, increasing speed until the plane gathered enough lift to bring it back to level flight. “Whew, that was a little scary,” Ray told his instructor. “But it was easier than I thought it would be.”

“Ray, you’re a natural. I think you’re gonna be a good pilot.” His instructor’s words of encouragement boosted Ray’s confidence.

“As in the introduction to any airplane, the first thing that we did was learning to feel what it felt like when a plane goes into a stall, how to get out of it and get a feeling of what it means to fly by the seat of your pants. In the course of the lessons we did many turns, lazy eights, more stalls, and eventually, practice landings,” remembered Ray.

In the event of an engine malfunction in flight, cadets learned how to make a forced landing. Without warning, instructors would cut the throttle and say, “Forced landing!” The cadet had to quickly scope out a suitable field, spiral down and make a pass as if he were landing the plane, give her the gun and fly away. It taught the cadets to be aware of the surrounding terrain and to immediately identify a safe landing field, recognizing obstacles like trees, hills, and power lines.

For the next few weeks, every day that weather permitted, Ray and his fellow cadets were on the flight line in the early morning, right after chow. Practicing what they’d learned, the cadets spent innumerable hours in the sky. On overcast days, they would fall in for calisthenics, marching drills, gunnery range practice or running the base obstacle course to stay fit. Without instrument instruction and certification, which would come during the next phase of their training, they could only fly on clear days.

On the weekends, the base would host dances with a live swing orchestra in the Sikeston base hall. Ladies from the Women's Army Corps (WACs), from the Women’s Airforce Service Pilots (WASPs), and base nurses (the base had its own hospital) were invited. They had a fine time co-mingling with members of the opposite sex, as there was little chance to do so with their rigorous training schedule. It gave them a chance to unwind and experience a bit of a “normal” life. But the first thing the next morning, it was back to the flight line. The Army wasted no time. The war was raging on two fronts, and the immediate need for trained pilots was paramount.

After a morning lesson with his instructor, Ray landed his PT-19 and taxied back to the flight line. It was a beautiful day, clear but chilly. His instructor shimmied out of the rear cockpit but before Ray could do the same he said, “You take it up and just remember what you have learned.”

“You mean me alone?” Ray asked.

“Yes, you are ready to solo. Good Luck, Mister!”

“I really felt I was ready to solo, but it is an experience to do so,” said Ray. “Of course, one never forgets his first flight as the pilot of an airplane.”

His instructor climbed off the wing, giving Ray a nod. Ray started to feel very nervous, and the adrenaline made him tremble.

“I remember taking off and circling to left of the field, and made my approach to the landing area. All the time I was softly singing, ‘Oh, what a beautiful morning. Oh, what a beautiful day. Oh, what a beautiful feeling everything's going my way.’ It helped me to stay calm and remember what I had learned. The strange thing I remember was that it felt as if my instructor was still in the rear cockpit with me in the plane!”

Ray made a near-perfect touch down, then taxied back to the hangar. He shut down the engine, set the brake and climbed down out of his PT-19. One of the instructors called to him, “Ray, they need you in the control room right away.” Thinking he was in a bit of trouble, Ray went through his solo flight step by step in his head, trying to remember if he did something wrong.

He grabbed his gear and walked briskly toward the control tower. When he entered the control room, he was greeted with cheers and applause from a cadre of cadets and instructors. It was the custom whenever a cadet made his first solo flight. Ray was borne aloft like a glider on a warm updraft and for him, it truly was a beautiful morning

From that point, Ray flew alone, practicing his maneuvers. He was taught how to fly loops and rolls. He also flew with the aircraft inverted, which was a thrill in the PT-19’s open cockpit. He performed many touch and go landings, because landing the plane – lining it up with the runway, controlling his descent rate and touching down lightly - was one of the most difficult elements of flight to master. The cadet would land, then gun the throttle to take off again, loop around and repeat the procedure.

Winter had set in, but the flying didn’t stop so long as it was clear. One morning, after a light snow, the runways were plowed and the cadets once again set off to the flight line. There were countless cadets on base and many, like Ray, became proficient flyers. Others not as much, and some washed out for a host of reasons, including a lack of attention to detail. Flying was a dangerous endeavor and even a slight lapse of attention could be the difference between life or death.

Waiting to check out his plane, Ray glanced casually across the snow-covered field and saw some of the bulls rutting around in the distance. He also noticed a man walking past the disinterested herd toward the airfield. The bulls watched as he passed maybe a hundred yards away. As the man approached, Ray recognized it was one of the cadets – a friend who had a reputation for sloppiness. He was disheveled and barefoot, dragging his parachute with him.

The freezing cold cadet reached the apron, shaking his head and swearing out loud. Some of the other men walked toward him to see what was going on.

“Hey, what the hell happened?” shouted one of the men.

“Yeah, and where the hell is your aircraft, Mister?” demanded an instructor.

It turned out that he was practicing loops, which included inverting his plane. “Well, the guy forgot to fasten his harness and fell right out of the damn plane.” To this day, Ray still laughs about it. “He also forgot to tie his boots, so when he popped his chute, the sudden stop made them fall right off his feet. He had to walk two or three miles barefoot through the snow to get back to base.”

Ray and the other cadets hooted with laughter. The instructors, however, were not amused. His plane continued flying, unmanned and upside down, until its fuel ran out and it crashed into a corn field. It was damn fortunate no one got hurt – the hapless cadet or anyone on the ground.

After the kerfuffle, Ray finished his flight, then parked his plane and headed for the warmth of the control room. There, the men were still laughing about the episode. Later, begging to be reassigned, the unfortunate cadet was denied. The army’s need for pilots trumped his disastrous mistake.

As his six weeks of primary flight training wound down, Ray was ordered to report to Winfield, Kansas for basic flight training, which would put him in a more powerful aircraft and teach him complex and risky maneuvers as well as basic navigation. At every step, the cadets were subjected to random flight checks by their instructors to determine their progress and evaluate their skills. Ray was an excellent student and a proficient pilot. His only error the entire time at primary was to make a turn too soon after takeoff that brought his plane over a populated area off limits to student pilots for safety reasons. He received a “gig,” the term they used for a demerit.

Accumulating too many gigs would lead to a cadet’s reassignment. Ray’s gig actually gave him a sense of relief for two reasons. First, it was extremely rare for any cadet to finish his training with none, making Ray feel a little more in touch with his comrades. It also relieved the pressure he felt to perform to perfection.

One night, about a week before graduation, Ray and a number of other cadets were invited to the home of a local girl. A beauty, she lived in a near mansion at the edge of town. The Sikeston Bulls fawned over her, living up to their reputations. The girl seemed to like Ray, whose demeanor and politeness impressed her. Upstaged, they conspired to take Ray out of circulation by feeding him drinks. They knew he had a low tolerance for alcohol since he hardly ever touched it.

The girl clearly recognized the Bulls’ attempt to deactivate Ray, so she whispered in his ear to forewarn him. No fool, Ray gladly accepted the drinks, then discretely dumped them into a nearby houseplant while the other cadets imbibed relentlessly. After a couple of hours, the well-oiled cadets sallied into the cold night, singing and joking their way back to base. The help tidied up the house, her parents retired to the upstairs bedroom, and Ray and the girl stayed up most of the night talking, canoodling, eventually falling asleep on a sofa. In the morning, Ray pecked her on the cheek, thanked her for her family’s hospitality, then made his way back to base to find a barracks full of hungover cadets. “Anyone up for handball?” he shouted obstreperously, triggering a few moans and expletives. Ray laughed out loud as he grabbed his dopp (shaving) kit and headed for the showers.